US Army Corps of Engineers®
Engineer Research and Development Center

Los Angeles/Long Beach, CA Harbor

Description

Wave and water-level measurements have been directed by CHL for Corps of Engineers District, Los Angeles (CESPL) and the Ports of Los Angeles and Long Beach (LA/LB) since 1984. The most recent LA/LB harbor monitoring system includes twelve wave and water-level gauges in and around LA/LB harbors. Collected data are used in design considerations for harbor modifications.

Issue

An increase of harbor operations created the need for additional mooring areas within the two harbors. Modifications have resulted in extensive expansion and modification of the LA/LB harbors. The Field Data Collection and Analysis Branch operates and maintains a system of wave gauges, located at strategic places in the harbor to assist CESPL in assessments of impacts of channel modifications, dredging operations, and breakwater performance; and, to help the Ports of Los Angeles and Long Beach determine the best location, orientation and configuration for required pier enhancements.

Products

Near-real-time wave, water level and surge data are provided via the Internet for all locations. Statistical summaries are provided annually. Data and additional information can be found at http://sandbar.wes.army.mil/

Supporting Technology

Near-real-time wave and water-level data are acquired using in-water gauges that transmit data to shore using underwater cable and radio telemetry. Data are automatically transmitted to the Coastal and Hydraulics Laboratory via the Internet.

Benefits

Harbor wave and water-level data provide CESPL and the Ports information for evaluation of hydrodynamic characteristics of the harbors and assists in decisions concerning pier construction, location, orientation and configuration. Measured data are used to calibrate and validate physical and numerical models.

Sponsors

Corps of Engineers District, Los Angeles

Point of Contact

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Partners

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